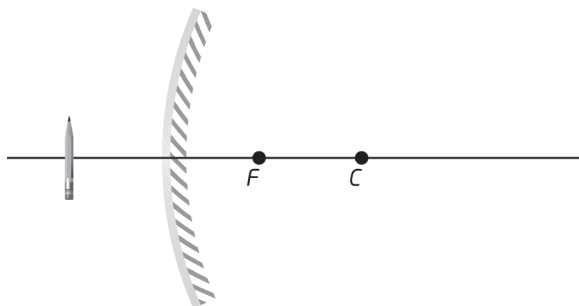


Section 10.4 Review (Alternative Format)

Goal • To review the concepts from Section 10.4.

1. Draw a ray diagram for the convex mirror in this diagram. Use Table 10.5 in your textbook as a guide.



Fill in the blanks to complete the statements in questions 2 to 6.

2. A concave mirror curves _____ the object, while a convex mirror curves _____ from the object. The focal point and the centre of curvature of a concave mirror are in _____ of the mirror, while the focal point and the centre of curvature of a convex mirror are _____ the mirror.
3. The value of the focal length of a convex mirror is negative because the focal point is _____.
4. An object in front of a concave mirror can be between the mirror and the _____, between the focal point and the centre of _____, or beyond the _____ of _____. However, a convex mirror is always between the _____ and both the centre of curvature and focal point.
5. Convex mirrors are often used as security mirrors in convenience stores. These mirrors reflect an image of a _____.
6. Images in spherical mirrors—either convex or concave—are distorted because of _____.



Section 10.4 Review (Alternative Format)

7. Some vehicles have a two-part side mirror that has a plane mirror with a smaller convex mirror on top of it.

a. What is the advantage of the plane mirror?

b. What is the advantage of the convex mirror?

8. A concave mirror has a focal length of -5 cm. An object with a height of 4 cm is 3 cm from the mirror.

a. Use the mirror equation to calculate the image distance, d_i .

b. Use the magnification equation to calculate the image height, h_i .

c. Complete the ray diagram below, and use it to check your answers to parts a and b.

